General features:

This stack flowmeter uses the same S type Pitot tube (extensively-tested technology) than in model BETA5M, stack particulate monitor, based on isokinetic sampling.

The DTP 701 is a continuous massflow monitoring system, allowing:
- the measurement of velocity, temperature, and static pressure of emission gases (stack and smoke flue)
- the determination of the flow rate for computing pollutants massic emissions (particulate, HCl, SO2, NOx...)

This compact equipment, directly installed on the stack, is made of:
- a Pitot tube
- a control unit including sensors for measurement of:
  - velocity
  - temperature
  - static pressure
- an internal microprocessor for calculation of the gas flow
- 4 analog outputs (optional serial output)
**Probe:**
- “S” type industrial Pitot tube made of 316 L stainless steel (option Hastelloy), connected to a differential pressure sensor located in control unit case.
- Our BETA5M analysers are already equipped with this type of Pitot tube for stack gas velocity measurement required for isokinetic sampling.
- The Pitot tube can operate continuously thanks to an automatic or manual backflush.
- DTP 701 is equipped with a Pt 100 type temperature sensor.
- The probe composed of a Pitot tube and a temperature sensor slides on the flange, thus allowing the user to select the most appropriate location within the diameter of the duct.

**Control unit:**
The control unit includes the following:
- differential pressure sensor
- static pressure sensor
- equipment allowing the backflush of the Pitot tube
- mother board
- microprocessor board
- connection box for the 4 analog outputs (velocity, temperature, static pressure, flow)
- keyboard and display assembly which allows to display the measurements, to program and to access to the following parameters/functions: date and time, automatic backflush frequency (1, 3, 6, 9, 12, and 24 h), language (french or english), analog outputs settings, sensor tests (DP, static pressure and temperature).

<table>
<thead>
<tr>
<th>Length (m)</th>
<th>Insertion (m)</th>
<th>Reference Inox</th>
<th>Reference Hastelloy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.3 to 0.7</td>
<td>CA-DTP-S10</td>
<td>CA-DTP-R10</td>
</tr>
<tr>
<td>1.5</td>
<td>0.6 to 1.20</td>
<td>CA-DTP-S15</td>
<td>CA-DTP-R15</td>
</tr>
<tr>
<td>2.25</td>
<td>1.1 to 1.95</td>
<td>CA-DTP-S22_5</td>
<td>CA-DTP-R22_5</td>
</tr>
</tbody>
</table>

**Options:**
- Galvanic isolator (max. load 250 ohms)
- Serial link board RS 232 or 422